IBM

Data Processing Division

Program and Program Product Announcement

CICS
DCS/VS
PRINTEXT

DOS/VS RELEASE 31 IS AVAILABLE

· SCP 5745-010

DOS/VS Release 31 is ready for shipment with:

Additional device support ... improvements in data base and data communications features ... and the integration of several independent component releases (ICRs).

Highlights ...

- VSAM improvements (see P75-10)
- Access Method Services enhancements (see P75-10)
- New BTAM generation parameter
  Results in reduced storage requirements for users without start/stop teleprocessing devices.
- POWER/VS 3540 support (see P74-52)
- Integration of ICRs
  - POWER/VS (see P74-52)
  - VTAM/TOLTEP (see P74-50)
  - Subsystem Support Services (see P74-50)
  - 3600 Host Support (see P74-50)
- New teleprocessing balancing feature
  In paged environments, trade-off is now possible between TP response time and batch through-put.
- Diskette IOCS enhancements
- SYSGEN (IJBSGEN) improvements
- VTAM, Subsystem Support Services, 3600 enhancements, 3650 SDLC and 3790 SDLC support.

Additional details of these changes start on page 4 and are in the Memorandum to Users which has been mailed to all registered DOS/VS users. Publications have been updated and are available via SLSS and from Mechanicsburg.

CICS/OS/VS V1.1.0 IS AVAILABLE

5740-XX1 (Version 1 Modification Level 1, Release 0)

Version 1.1.0 of CICS/OS/VS, which is ready for shipment, provides new functional enhancements over previous versions. Applica-

CONTENTS

tion programs developed for previous versions of CICS (5736-U11, 5736-XX6, 5736-XX7, 5734-XX7) as well as existing CICS/VS V1.0 and V1.0.1 application programs are source-code compatible with this version and need only be recompiled.

Highlights ...

VTAM Support ... Using VTAM, the CICS/VS user has the ability to share network resources with other VTAM communications application programs. The new CICS/VS terminal control program and terminal control macro instructions provide for more terminal I/O overlap by using VTAM's read-ahead capabilities and by providing a direct interface between the application program and the terminal control program. Existing CICS/VS terminal support using BTAM can co-reside with the new VTAM support.

3600 Finance Communication System ... The following components are supported using VTAM: 3601 Finance Communication Controller ... 3604 Keyboard Display ... 3610 Document Printer ... 3611 Passbook Printer (supported as a 3612) ... 3612 Passbook and Document Printer ... 3614 Consumer Transaction Facility ... 3618 Administrative Line Printer. Device independent support is provided for all 3600 Finance Communication System components except 3614. See the sales manual (S 3600.1) for details on the 3600 Finance Communication System.

Improved DL/I Interface ... The CICS/OS/VS DL/I interface has been significantly improved to provide multithread access with segment intent scheduling to an IMS/VS DL/I data base. The following list states the IMS/VS DL/I versions that run with the CICS/OS/VS versions:

IMS/VS DL/I	CICS/OS/VS
V1.0,V1.0.1	V1.0,V1.0.1
V1.0.1	V1.1
V1.0.1,V1.1	V1.1.1

IBM INTERNAL USE ONLY

Release Date: March 31, 1975
Distribution: DP managers, marketing representatives, systems engineers, and administrative account specialists
FE managers and program systems representatives

P75-19

- Advanced operating system function (VSAM, VTAM).

- Terminal networks consisting of more than one type of terminal.

- .Advanced CICS/VS functions (built-in functions, journaling, device independence, terminal paging).

VM/370 considerations are explained in the sales manual pages.

Security ... CICS/VS provides facilities to help prevent unauthorized access of information.

Through an optional sign-on facility, terminal operators authorized to access the online application first identify themselves to the system by name. Through the use of security codes allocated by the user to each operator, CICS/VS determines which functions each operator is authorized to carry out.

If a terminal operator attempts an unauthorized function, an error message -- SECURITY KEY VIOLATION HAS BEEN DETECTED -- is sent to the terminal operator. A warning message is sent by CICS/VS to the master terminal operator who controls the entire online system. This warning message notifies the operator that a security violation occurred at the specified terminal: an operator entered an unauthorized transaction code. In this way, the master terminal operator is alerted so that he can take appropriate action.

These security provisions can be extended by user-programming, if required. For example, a terminal operator authorized to inquire into personnel details can be limited by the application program to accessing only certain personnel details.

Marketing Support ...

Publication Material ... Promotional Brochure (G520-2395) ... Courier (GV20-3099) ... Sales Flyer (G520-2725) ... DB/DC Announcement Brochure (G520-2746) ... Specifications (GH20-4354 for OS/VS) are available from Mechanicsburg.

Education Courses ... A wide range of courses is available to meet customer and IBM education requirements. See your regional education guide.

Technical Support ... Each region has trained CICS/VS marketing support representatives who should be contacted for technical and marketing assistance. These individuals are backed up by the Palo Alto Systems Center for any unresolved questions or situations.

Systems Assurance ... CICS/OS/VS, OS/VS VTAM, and/or NCP/VS require a regional systems assurance review prior to being ordered via RAS (see GI 4.1 in the sales manual). Current CICS/OS/VS account

representatives who are upgrading their accounts to CICS/OS/VS V1.1 to take advantage of VTAM should also review their plans to interface CICS/OS/VS to VTAM at the required VTAM regional systems assurance review.

Sales Compensation Plan ... Normal provisions apply. In addition, CICS/OS/VS is eligible for a productivity program bonus of $500, as defined in the Sales Compensation Plan.

The monthly license fee is $825. The programming service classification is A, which includes Field Engineering pre-installation service planning. The pre-installation testing period is two months.

No RPQs will be accepted at this time.

Ordering information is on page 11.

M. G. Kirby
Vice President - Systems Marketing

CHANGE IN AVAILABILITY OF PRINTEXT/370 AND PRINTEXT/370-CLASSIFIED PRPQs

5799-ALR (PRPQ EF3414) for PRINTEXT/370
5799-ALQ (PRPQ EF3413) for PRINTEXT/370 Classified

PRINTEXT/370 and PRINTEXT/370-Classified PRPQs, announced June 14, 1974 (see P74-28), are rescheduled to allow more time to achieve desired program function and performance.

The planned availability date for PRINTEXT/370 is now January 30, 1976, instead of April 28, 1975; PRINTEXT/370-Classified, April 30, 1976, instead of July 28, 1975.

Action Required ... Branch offices with active or approved bids or outstanding customer proposals must contact Mr. L. L. deLorimier (8-946-2370 or [301] 654-7510 x370) so that there can be an immediate review of each situation.

New Orders ... Both of these PRPQs require specific and individual Special Product Marketing and DPD HQ approvals before being proposed to any customer. These approvals will consider customer expertise in DOS/VS, PL/I, System/7, and composition and classified applications in setting delivery dates.

PRINTEXT/370 provides the user with high quality text composition, hyphenation, proofing and correction, and text management capability for newspapers, printers, and publishers. A device module generator aids the user in supporting linecasters and a wide variety of photocomposers.

Operates with VSAM under DOS/VS
Provides improved typography
Easier mark-up for text format input
Expanded keyboard tables for input flexibility
Provides programming to channel-attach System/7 for Teletype CX Reader* and BRPE Punch* support

The monthly license fee is $450.

PRINTEXT/370-Classified stores, corrects and produces galleys of sequenced ads.

PRINTEXT/370-Classified requires PRINTEXT/370 (5799-ALR) and cannot be operated on a stand-alone basis.

Classified ads are stored on disk
Corrections can be applied by line or word
Classified file dump is concurrent with other operations
Multiple ad insertion options
Choice of output sequences

The monthly license fee is $255.

PRINTEXT/370 and PRINTEXT/370-Classified ... The programming service classification is B. Pre-installation testing period is two months. Installation license applies.

Marketing Support ... The success of the marketing and implementation effort depends on the knowledge and experience of the marketing representatives and the customer. The Media/Cross Industry Systems Center, Bethesda, Maryland, is prepared to assist IBMers in installation planning and guidance to achieve a successful implementation. Hotline support is available on 8-946-2316 or (301) 654-7510 x316.

The following marketing support items are available from Mechanicsburg: Promotional Brochure for Newspapers (G520-2892), Promotional Brochure for Printers and Publishers (G520-2891), General Information Manual for Newspapers (GE20-0464) and Design Objectives (GH20-4272 and GH20-4273).

Education: Executive Seminars and Implementation Classes are available.

Sales Compensation Plan ... Normal provisions apply.

J. S. Mitchell
Director - Media and Cross Industry Marketing

* Registered Trademark of Teletype, Inc.

VSAM

Alternate Indexes ... This new feature permits application programs to access the records of a VSAM entry or key sequenced data set on the basis of keys other than the prime key. These alternate keys may be non-unique and must be contained in the base data record. Once an Alternate Index has been constructed by using Access Method Services, it may optionally be automatically updated whenever a data record is changed in the base data set to which it relates.

Relative Record Data Set ... With this feature the data set is viewed as a numbered sequence of fixed length slots. Records may be inserted, updated, read or erased in these slots using VSAM keyed processing, with the slot (i.e., record) number as the key. No index is used since the physical location of each record is calculated directly by VSAM from its record number and the characteristics of the data set.

GET Previous ... This feature permits retrieval and update processing on the basis of descending key values, relative record numbers, or relative byte addresses. Processing may begin either within or at the end of the data set.

Reusable Data Set ... This new capability allows a data set to be reused (i.e., reset to *empty* when opened, and reloaded) many times without being deleted and redefined. A reusable data set may be any key sequenced, entry sequenced, or relative record data set that does not have an alternate index associated with it and that does not reside on unique space. However, an alternate index itself may be a reusable data set.

Spanned Record ... Originally VSAM did not permit a record to exceed a control interval in size. The Spanned Record feature removes this restriction, allowing a record to occupy multiple control intervals within a control area. If indexed, the keys must be in the first control interval.

Catalog Recovery ... Extensions to the facilities within VSAM Catalog Management and Access Method Services now permit limited access, via Access Method Services, to data that is not addressable via the catalog (due to loss of or damage to the catalog or the data for example). Further, the user can restore addressibility of the data and reconstruct the associated catalog entries.

User Catalogs ... This facility can increase volume portability by allowing user catalogs to control VSAM data sets. A user catalog and its associated data can be moved from one system to another without reading or writing data sets.

Automatic Close at End of Job ... This facility is designed to update the catalog entry and closes all open VSAM data sets within a partition. This helps to ensure that the data sets have been closed properly, whether the end of job was normal or abnormal.

Productivity ... An additional improvement has been made to VSAM and Access Method Services which, while not providing new function , will make their use more productive.

VSAM now allows the re-use of control intervals within a control area by records with keys that differ from those originally loaded. In some cases this will improve space utilization and reduce control area splits.

Performance ... The primary objective of the VSAM enhancements is to add functions to the original version.

Potential performance improvement from the following enhancements varies from installation to installation and from application to application within an installation.

The use of alternate indexes available in this release of VSAM may reduce the need to sort and/or maintain data in multiple sequences, thus reducing the scheduling of redundant work.

The user can now specify the blocksize to be used by Access Method Services during the EXPORT process, and can also IMPORT into a user defined data set.

Changes have been made to OPEN and CLOSE to improve their performance.

The VSAM control block manipulation macros have been improved to reduce the overhead in some cases when the RPL fields are being manipulated or displayed.

Access Method Services

Access Method Services has been enhanced in support of enhanced VSAM. Highlights include:

Extended DEFINE capability in support of recoverable catalogs, user catalogs, alternate indexes and paths, relative record VSAM files, reusable VSAM files, VSAM spanned records.

New BLDINDEX function providing capability to build a VSAM alternate index over a VSAM base cluster.

Three new functions - EXPORTRA, IMPORTRA and LISTCRA - providing the capability to recover VSAM files using catalog recovery areas and to list entries in catalog recovery areas.

Extended ALTER, DELETE, LISTCAT, EXPORT and IMPORT capability in support of enhanced VSAM features; e.g., alternate indexes, paths, recoverable catalogs, user catalogs.

Extended REPRO capability in support of relative record files, reusable files and path processing. New REPRO capability to replace records in VSAM key sequenced and relative record files.

Extended PRINT capability in support of relative record files and path processing.

BTAM

A new parameter has been added in the BTMOD macro: SS=YES/NO (YES is the default).

Coding SS=NO causes all of the start/stop (including 2260 remote) code to *not* be included in the BTAM logic module. Coding SS=NO will enable BSC only users, local (2260 and/or 3270) users or BSC-local mixed users to eliminate excess code from their BTMOD logic modules.

If SS=NO is coded then SSAPL=YES, AUDIO=YES or WTTA=YES should not be coded.

POWER/VS

Under POWER/VS the 3540 Diskette Input/Output unit is now supported as an input device for spooled SYSIN files or spooled data files. Multi-volume files are allowed for either case. Also when running under POWER/VS a program can read either type of file directly.

The following incompatibilities exist between POWER/VS and DOS/VS POWER:

- In the RDR statement the logical unit name entry has been changed into a physical device address.

- For single volume files no automatic feed is done after reading the files.

POWER/VS
VTAM/TOLTEP
Subsystem Support Services
3600 Host Support

These components, previously available as an independent component release against DOS/VS Release 30, have now been integrated into this Release of DOS/VS.

Full details about these components can be found in the respective publications.

Teleprocessing Balancing

Teleprocessing Balancing (TP Balancing) is a new feature that allows the teleprocessing user, who has batch jobs concurrently running in a paging environment, to trade off TP response time versus batch throughput. The trade off is such that TP response time is reduced and at the same time becomes more consistent, at the expense of batch degradation.

Support in the supervisor is generated automatically for multi-partition systems when the TP parameter of the SUPVR macro is specified. The increase in supervisor size is approximately 300 bytes.

Support in the teleprocessing system is via two new macros: TPIN and TPOUT. TPIN signals to DOS/VS that an immediate demand is made by the teleprocessing system for system resources, for example, when a message has been received. After processing is completed, TPOUT must be issued to inform DOS/VS that the teleprocessing system has no further processing to do for the time being. Failure to issue the TPOUT macro at this moment can cause serious batch degradation.

Normally, the TP Balancing function is not active. In that case neither the TPIN nor the TPOUT macro has any effect. To make it active the operator has to enter a command through the console: the new TPBAL command. In the operand he/she specifies the number of batch partitions in which processing can be delayed. These are always the partitions of lowest priority. The system responds with a message that says which partitions are affected. The TPBAL command without an operand is given as a possiblity for the user to interrogate the system on whether TP Balancing is active or not, and, in case it is, which partitions are affected. This sort of display is also given by the system, though only if TP Balancing is active, whenever the operator issues the PRTY command to alter/display priorities.

After TP Balancing has been effective during certain peak hours, the operator can return to the regular multiprogramming capability by entering TPBAL 0, which resets TP Balancing and makes it dormant.

Diskette IOCS

The verify field of the diskette HDR1 label is provided to assist the user with the task of controlling the flow of diskettes in the keypunch room. A 'v' is written by the 3741/3742 as the result of a keying operation in the 'verify' mode. The 3540 follow-on support consists of checking for a 'v' in the verify field of the HDR1 label on diskettes. It has been implemented in POWER/VS and LIOCS.

IJBSGEN

A list of components that will be automatically deleted is now printed on SYSLST along with the IJBSGEN generated job stream. This will aid the user to check the SYSIN deck before execution.

User SYSGEN procedures may also be included in the IJBSGEN generated job. Please consult the SYSGEN manual for further details.

VTAM

Support for the following on leased SDLC lines:

. 3650 Retail Store System
. 3790 Communications System

Note: Host Support for 3650 and 3790 will be separately orderable and is required to operate these devices with VTAM. VTAM support for these devices is an integral part of Release 31.

Message Suppression

Messages are classified into five categories:

. Informational
. Warning
. Normal Error
. Serious Error
. Terminal Error

A new parameter has been created to enable the operator to suppress a certain class or classes of messages. The parameter is 'SUPP'. If the default is used all messages will be displayed.

A new modify command is available so that the user can change the value assigned at start time, thus varying the class of messages to be displayed.

TP Balancing

TP Balancing allows the user to deactivate background batch upon receipt of VTAM work and to reactivate upon completion of all work.

Remote 3704/3705

VTAM can recognize and use the 3704/3705 controller in NCP mode as a remotely attached communication controller, directing its attached BSC and start/stop devices.

Note: NCP/VS Version 3 Modification Level 1 (5747-AJ2) is a prerequisite for this release and is orderable separately.

Subsystem Support Services (SSS)

A new transaction journal report and other revised printouts have been added. SSS System Generation is accomplished using the ENDGEN macro. This release of SSS supports VTAM only.

SSS in Release 31 allows for operation of multiple controllers of the same type (either 3601, 3651, or 3791) concurrently. Support for operation of more than one controller type, either serially or concurrently, is not provided by SSS.

In November, 1975, on the then most current release of DOS/VS, SSS will allow operation with multiple controller types, serially, one type at a time. In addition, controller-initiated requests from the Finance Communication System will be processed concurrently with host-initiated requests of other controller types. (see DP Letters 274-42, 274-44 and 274-45).

3600 Finance Communication System

The 3601 configuration macros now support a new terminal 3611 which is a passbook printer. Support of APB only transmission is now available through the use of the SCPREP command of SSS.

CPUs Supported ...

DOS/VS is system control programming for System/370 Models 115, 125, 135, 145, 155 II and 158. Minimum storage and device requirements do not change with this release. Specification of more than minimum functions will normally result in above-minimum requirements. Added programming function within this release presupposes the presence of hardware devices/machines/ features required for program execution.

Required System Features

VTAM requires the Compare and Swap and the compare Double and Swap instruction which are available as follow:

. Optional on System/370 Model 135 via the Conditional Swapping Feature (1051).

. Optional on System/370 Model 145 via Advanced Control Program Support Feature (1001), or the Conditional Swapping Feature (1051).

. Standard on System/370 Models 115, 125, 155II and 158 (in simplex mode).

Required EC Levels

. . EC311279 (or REA23-11872) must be applied to a 3705 Type I Channel Adapter if a PEP system is loaded in the 3705 and the native and emulator subchannels both use the Type I Channel Adapter.

. EC311262 must be applied to a 370X Type II Channel Adapter to enable the 370X to function with VTAM.

. APAR fixes are integrated into Release 31 to support the 2560 attachment on the 3115 at EC level EC364217 and on the 3125 at EC level EC364087.

. EC741181 must be applied to the 3600 DTR.

. In order to run half duplex SDLC on a Type 2 CSB, the following EC level is required: 3705 EC311283, 3704 EC311138.

. REA1372943 must be applied to all 3614s.

Action Required ...

Current Users · PID will automatically send users of record for DOS/VS, a Memo to Users containing ordering information for Release 31.

To receive this new program material, users must follow the ordering instructions included in the Memo to Users and send the required tapes or disk to PID. For program support purposes, Release 29 will be considered current until June 30, 1975 at which time support will be withdrawn.

New Users - To be entered via AAS using ordering instructions that follow.

Existing orders for DOS/VS on a later scheduled date need not be reentered into AAS unless a feature code change is required.

Planning considerations

Customers currently using POWER should review their plans to move to POWER/VS since POWER is not provided with Release 31.

To achieve the storage savings associated with the new BTAM generation parameter, existing teleprocessing programs utilizing BTAM should be linkage edited (or reassembled) with the new version of BTMOD.

Host support for operation of the Binary Synchronous versions of the 3650 Retail Store System, available as an Independent Release for Release 29, and the 3660 Supermarket System, available as an Independent Release for Release 30, is supported by Release 31 as Independent Releases. See DP letters P74-35 and P74-45 for additional information. Ordering instructions are in the Guide for Ordering Programs (ZZ20-3651).

Publications Shipped from PID

The SRL publication requirements of an installation should be met by the SRL Subscription Service. PID will ship only those basic publications, one copy each, that have changed with a release to current users reordering a new release and all basic publications to new users for a period of four weeks after the availability of a DOS/VS release. This four week period will ensure time for receipt of the SLSS and DAPS distribution.

IBM representatives should ensure that DOS/VS users and potential DOS/VS users have subscribed to SLSS in sufficient time to receive the DOS/VS-related documents before receipt of the machine readable material from PID.

Optional publications such as PLMs, microfiche, and non-release dependent SRLs are not available from PID and can be ordered from Mechanicsburg.

Ordering Information - DOS/VS must be ordered through AAS.

5745-010

Basic Material

Documentation: One copy each of the following pulications will be provided with the programming package: DOS/VS System Generation (GC33-5377), DOS/VS System Control Statements (GC33-5376), DOS/VS Supervisor and I/O Macros (GC33-5373), DOS/VS Operating Procedures (GC33-5378), DOS/VS Messages (GC33-5379), DOS/VS Utilities (GC33-5381), DOS/VS Assembler (GC33-4024), / DOS/VS Access Method Services (GC33-5382).

Four weeks after the availability of the release, all

SRLs and TNLs are available through Systems Library. Subscription Service (SLSS). After this period, no form numbered documents will be shipped by PID with the machine readable material.

If only the publications or if additional copies of the publications are required, order from the appropriate publications distribution center.

Machine Readable Material: DOS/VS will be distributed to the user on either magnetic tape in DUMP/RESTORE format, or on a DASD in SYSRES format.

Order the basic material via AAS by number 5745-010 plus one of the following feature numbers:

Feature Number	Distribution Medium	User Volume Required
9027	9/800 - M Tape	1 - 2400' reel
9029	9/1600 - M Tape	1 - 2400' reel
9031	9/6250 - M Tape	1 - 2400' reel
9060	2316 Disk Pack	1 pack
9061	3336 Disk Pack	1 pack
9063	3348 Data Module	1 module

Optional Program Material (order through AAS)

One copy each of the optional material items are available at no additional charge.

Optional Machine Readable Material: Consists of the SCP source code in blocked SYSIN format.

Select the feature number for the desired distribution medium.

Feature Number	Distribution Medium	User Volume Required
Volume 1		
7802	9/800 - M Tape	1 - 2400' reel
7803	9/1600 - M Tape	1 - 2400' reel
7828	9/6250 - M Tape	1 - 2400' reel
7804	2316 Disk Pack	1 pack
7805	3336 Disk Pack	1 pack
7806	3348 Data Module	1 module
Volume 2		
7808	9/800 - M Tape	1 - 2400' reel
7809	9/1600 - M Tape	1 - 2400' reel
7829	9/6250 - M Tape	1 - 2400' reel
7810	2316 Disk Pack	1 pack
7811	3336 Disk Pack	1 pack
7812	3348 Data Module	1 module
Volume 3		
7814	9/800 - M Tape	1 - 2400' reel
7815	9/1600 - M Tape	1 - 2400' reel
7830	9/6250 - M Tape	1 - 2400' reel
7816	2316 Disk Pack	1 pack
7817	3336 Disk Pack	1 pack
7818	3348 Data Module	1 module

Feature Number	Distribution Medium	User Volume Required
Volume 4		
7820	9/800 - M Tape	1 - 2400' reel
7821	9/1600 - M Tape	1 - 2400' reel
7825	9/6250 - M Tape	1 - 2400' reel
7822	2316 Disk Pack	1 pack
7823	3336 Disk Pack	1 pack
7824	3348 Data Module	1 module
Volume 5		
7832	9/800 - M Tape	1 - 2400' reel
7833	9/1600 - M Tape	1 - 2400' reel
7837	9/6250 - M Tape	1 - 2400' reel
7834	2316 Disk Pack	1 pack
7835	3336 Disk Pack	1 pack
7836	3348 Data Module	1 module
Volume 6		
7842	9/800 - M Tape	1 - 2400' reel
7843	9/1600 - M Tape	1 - 2400' reel
7844	9/6250 - M Tape	1 - 2400' reel
7845	2316 Disk Pack	1 pack
7846	3336 Disk Pack	1 pack
7847	3348 Data Module	1 module
Volume 7		
7852	9/800 - M Tape	1 - 2400' reel
7853	9/1600 - M Tape	1 - 2400' reel
7854	9/6250 - M Tape	1 - 2400' reel
7855	2316 Disk Pack	1 pack
7856	3336 Disk Pack	1 pack
7857	3348 Data Module	1 module
Volume 8		
7858	9/800 - M Tape	1 - 2400' reel
7859	9/1600 - M Tape	1 - 2400' reel
7860	9/6250 - M Tape	1 - 2400' reel
7861	2316 Disk Pack	1 pack
7862	3336 Disk Pack	1 pack
7863	3348 Data Module	1 module
Volume 9		
7864	9/800 - M Tape	1 - 2400' reel
7865	9/1600 - M Tape	1 - 2400' reel
7866	9/6250 - M Tape	1 - 2400' reel
7867	2316 Disk Pack	1 pack
7868	3336 Disk Pack	1 pack
7869	3348 Data Module	1 module
Volume 10		
7870	9/800 - M Tape	1 - 2400' reel
7871	9/1600 - M Tape	1 - 2400' reel
7872	9/6250 - M Tape	1 - 2400' reel
7873	2316 Disk Pack	1 pack
7874	3336 Disk Pack	1 pack
7875	3348 Data Module	1 module
Volume 11		
7876	9/800 - M Tape	1 - 2400' reel
7877	9/1600 - M Tape	1 - 2400' reel
7878	9/6250 - M Tape	1 - 2400' reel
7879	2316 Disk Pack	1 pack
7880	3336 Disk Pack	1 pack
7881	3348 Data Module	1 module

Volume 12

7882	9/800 - M Tape	1 - 2400' reel
7883	9/1600 - M Tape	1 - 2400' reel
7884	9/6250 - M Tape	1 - 2400' reel
7885	2316 Disk Pack	1 pack
7886	3336 Disk Pack	1 pack
7887	3348 Data Module	1 module

Volume 13

7888	9/800 - M Tape	1 - 2400' reel
7889	9/1600 - M Tape	1 - 2400' reel
7890	9/6250 - M Tape	1 - 2400' reel
7891	2316 Disk Pack	1 pack
7892	3336 Disk Pack	1 pack
7893	3348 Data Module	1 module

Volume 14

7894	9/800 - M Tape	1 - 2400' reel
7895	9/1600 - M Tape	1 - 2400' reel
7896	9/6250 - M Tape	1 - 2400' reel
7897	2316 Disk Pack	1 pack
7898	3336 Disk Pack	1 pack
7899	3348 Data Module	1 module

Volume 15

7900	9/800 - M Tape	1 - 2400' reel
7901	9/1600 - M Tape	1 - 2400' reel
7902	9/6250 - M Tape	1 - 2400' reel
7903	2316 Disk Pack	1 pack
7904	3336 Disk Pack	1 pack
7905	3348 Data Module	1 module

Volume 16

7906	9/800 - M Tape	1 - 2400' reel
7907	9/1600 - M Tape	1 - 2400' reel
7908	9/6250 - M Tape	1 - 2400' reel
7909	2316 Disk Pack	1 pack
7910	3336 Disk Pack	1 pack
7911	3348 Data Module	1 module

Volume 17

7912	9/800 - M Tape	1 - 2400' reel
7913	9/1600 - M Tape	1 - 2400' reel
7914	9/6250 - M Tape	1 - 2400' reel
7915	2316 Disk Pack	1 pack
7916	3336 Disk Pack	1 pack
7917	3348 Data Module	1 module

Scheduled Program Ship Date: See the ordering guide.

Stackability: This program is stackable on a 2316 or 3336 disk pack or 3348 data module. See the latest Program Stacking Chart attached.

Related Optional Material

Machine Readable Material: The machine readable material containing the IBM source code in blocked SYSIN format divided into seven component groups:

Optional Volume 1   10 files

Attention Routines, Initiators, Terminators	5745-SC-AIT	
Checkpoint/Restart	5745-SC-CKR	
Environmental Recording and Editing Program	5745-SC-EHP	2 files
IPL and Buffer Load	5745-SC-IPL	
Job Control	5745-SC-JCL	
Librarian - Maintenance and Service	5745-SC-LBR	2 files
Linkage Editor	5745-SC-LKA	
Supervisor	5745-SC-SUP	

Optional Volume 2   7 files

Assembler	5745-SC-ASM	3 files
OCS/VS Distribution Program	5745-SC-CIS	
Display Operator Console Support	5745-SC-CCC	
Problem Determination Aids	5745-SC-PDA	
Recovery Management Support and Recording	5745-SC-AMS	

Optional Volume 3   15 files

Direct Access Method	5745-SC-CAM	
Diskette IOCS	5745-SC-CIC	
Disk Error Recovery Procedures	5745-SC-CKE	
Sequential Disk IOCS	5745-SC-CSK	
Compiler I/O modules	5745-SC-ICM	
IOCS and Device Independent I/O	5745-SC-IGX	
Indexed Sequential Access Method	5745-SC-ISP	
Magnetic Character Recognition IOCS	5745-SC-MCR	
Optical Character Recognition IOCS	5745-SC-CCR	
On-line Test Executive Program	5745-SC-CLT	
Paper Tape IOCS	5745-SC-PTP	
Magnetic Tape IOCS	5745-SC-TAP	
Tape Error Recovery Procedures	5745-SC-TPE	
System Utility Programs	5745-SC-UTL	2 files

Optional Volume 4   6 files

Basic Telecommunications Access Method	5745-SC-PTM	
1401/1440/1460 & 1410/7010 Emulators	5745-SC-EML	2 files
System/360 Model 20 Emulator	5745-SC-E20	3 files
Queued Telecommunications Access Method	5745-SC-CTM	2 files

Optional Volume 5   6 files

Virtual Storage Access Method	5745-SC-VSM

Optional Volume 6   7 files

Access Method Services	5745-SC-AMS

Optional Volume 7   25 files

Contains source macros for the component(s):

SUP (1), SUP (2), AIT (3), ASM (4), CKR (5), DIC (6),
CKE (7), DOC (8), ERP (9), LBR (10), MCR (11), CCP (12),
CTM (13), TAP (14), PTM (15), ISM (16), UTL (17), EML (18),
IPL (19), DGX (20), E20 (21), ICX (22), CAM (23), CLT (24),
ITF (25)

Optional Volume 8   3 files

PCWER/VS	5745-SC-PWR	
Virtual Storage Access Method Macros	5745-SC-VSM	
Subsystem Support Services Macros	5745-SC-SSS	

Optional Volume 9   5 files

Virtual Storage Access Method	5745-SC-VSM	3 files
PCWER/VS	5745-SC-PWR	2 files

Optional Volume 10   6 files

Virtual Telecommunications Access Method	5745-SC-VTM

Optional Volume 11   6 files

Virtual Telecommunications Access Method	5745-SC-VTM

Optional Volume 12   5 files

Virtual Telecommunications Access Method	5745-SC-VTM

Optional Volume 13   6 files

Virtual Telecommunications Access Method	5745-SC-VTM

Optional Volume 14   6 files

Virtual Telecommunications Access Method	5745-SC-VTM

Optional Volume 15   6 files

360C Host Support	5745-SC-12M	
360C Host Support Macros	5745-SC-12M	

Optional Volume 16   4 files

1CLTEP	5745-SC-TLT	3 files
VTAM Macros	5745-SC-VTM	1 file

Optional Volume 17   6 files

Subsystem Support Services	5745-SC-SSS

The following list contains all current DOS/VS publications.
Form numbers underscored are new with this release.
Publications can be ordered through/are distributed under ....

FBLs

CTAM Message Processing Program Services	GC27-6985-0
CTAM Message Control Program	GC27-6986-0
CTAM	GC27-6989-2
CS/VS - DOS/VS - VM/370 Assembler Language	GC33-4010-4
Guide to the DOS/VS Assembler	GC33-4024-2
Introduction to DCS/VS	GC33-5370-3
System Management Guide	GC33-5371-4
Data Management Guide	GC33-5372-3
Supervisor and I/O Macros	GC33-5373-3, GN33-9178
Tape Labels	GC33-5374-0, GN33-8778
DASD Labels	GC33-5375-1, GN33-8781
System Control Statements	GC33-5376-2
System Generation	GC33-5377-3
Operating Procedures	GC33-5378-2
Messages	GC33-5379-3, GN33-9176
Serviceability Aids and Debugging Procedures	GC33-5380-2
System Utilities	GC33-5381-1, GN33-8783
Access Method Services	GC33-5382-3
CLTEP	GC33-5383-0, GN28-2566
	GN25-0115
	GN25-0117
1401/1440/1460 DCS/VS Emulator on S/370	GC33-5384-0, GN33-7049,
	GN33-7065,
	GN33-7066,
	GN33-7062
1410/7010 DCS/VS Emulator on S/370	GC33-5385-0, GN33-7050,
	GN33-7067
System/360 Model 20 Emulator on S/370	GC33-5388-2, GN33-7068,
	GN33-7071
	GN33-7063
DOS/VS VSAM Planning Guide	GC33-5404-0
DCS/VS POWER/VS Reference Summary	GX33-9004-1

VTAM

Introduction to VTAM	GC27-6987-3
VTAM Concepts and Planning	GC27-6998-1
VTAM Macro Language Reference	GC27-6995-2
VTAM Macro Language Guide	GC27-6994-0, GN27-1469
	GN27-1481
DCS/VS VTAM System Programmers Guide	GC27-6957-1
VTAM Network Operating Procedures	GC27-6997-2, GN27-1484
DCS/VS and OS/VS TOLTEP for VTAM	GC28-0663-0, GN28-2561,
	GN28-2588

3600 Finance Communications System

System Summary	GC27-0001-3
Programmer's Guide and Component Descriptions	GC27-0004-0, GN27-1479
	GN27-1487
Instructions and Macros Reference	GC27-0003-0, GN27-1454
	GN27-1478
Host Services Program Reference	GC27-0005-1
Subsystem Support Services User's Guide	GC30-3022-2

PLMs

CTAM	ST27-7249-0
BTAM	ST27-7251-0, SN27-1462
Introduction to VTAM	ST27-7256-1
3600 Host Services Programs	ST27-7261-0
DCS/VS VTAM	ST27-7262-0, SN27-1470
DOS/VS VTAM Data Areas	ST27-7265-0
DOS/VS and OS/VS TOLTEP	ST28-0664-0
Subsystem Support Services	ST30-3017-2
Supervisor	ST33-6551-2
Error Recovery and Recording Transients	ST33-8552-1, SN33-8771,
	SN33-8784,
	SN33-8794
Logical Transients	ST33-8553-1, SN33-8772,
	SN33-8791,
	SN33-8795
Serviceability Aids	ST33-8554-1, SN33-8773,
	SN33-8796
IPL and Job Control	ST33-8555-2
Linkage Editor	ST33-8556-2, SN33-8785
Librarian	ST33-8557-2, SN33-8786
System Utilities	ST33-8558-0, SN33-8765,
	SN33-8775
LIOCS Vol. 1 (Introduction)	ST33-8559-1, SN33-8776,
	SN33-8798
LIOCS Vol. 2 (SAM)	ST33-8560-2, SN33-8788
LIOCS Vol. 3 (DAM & ISAM)	ST33-8561-1, SN33-8789
LIOCS Vol. 4 (VSAM)	ST33-8562-2
Access Method Services	ST33-8568-2
Assembler	ST33-8567-0, SN33-8165,
	SN33-8168
	SN33-8178

OLTEP	ST33-8568-0,	SN28-2567
		SN25-0118
POWER/VS	GT33-8570-1	
DOS/VS Handbook Volume 1	SY33-8571-2	SN33-8797
DOS/VS Handbook Volume 2	SY33-8572-0	
1401/1440/1460 DOS/VS Emulator on S/370	SY33-8573-0	SN33-7370
1410/7010 DCS/VS Emulator on S/370	ST33-8574-0	
Model 20 DOS/VS Emulator on S/370	ST33-8575-0	

Microfiche:

Component	Base Form Number	TNL Number
5745-SC-AIT	SYC7-1932-01	SNC7-2011
5745-SC-AMS	SYC7-1933-02	
5745-SC-ASM	SYC7-1934-01	SNC7-1963, SNC7-1987
5745-SC-BTM	SYC7-1935-00	SNC7-1946, SNC7-1964,
		SNC7-1992
5745-SC-CKR	SYC7-1936-00	SNC7-1947, SNC7-1967,
		SNC7-1998
5745-SC-CAM	SYC7-1937-01	SNC7-1968, SNC7-1999
5745-SC-DIO	SYC7-1966-01	SNC7-1986, SNC7-1995
5745-SC-DIS	SYC7-1964-03	
5745-SC-DKE	SYC7-1938-03	
5745-SC-DOC	SYC7-1939-02	
5745-SC-DSK	SYC7-1940-00	SNC7-1948, SNC7-1982
		SNC7-2000
5745-SC-EML	SYC7-1941-00	SNC7-1949, SNC7-1970,
		SNC7-1993
5745-SC-ERP	SYC7-1942-01	SNC7-2001
5745-SC-E20	SYC7-1943-01	SNC7-1971, SNC7-1997
5745-SC-IOM	SYC7-1944-01	SNC7-1981, SNC7-2002
5745-SC-IOX	SYC7-1945-00	SNC7-1951, SNC7-1972,
		SNC7-2003
5745-SC-IPL	SYC7-1946-01	SNC7-1983, SNC7-2004
5745-SC-ISM	SYC7-1947-00	SNC7-1952, SNC7-1973,
		SNC7-2005
5745-SC-JCL	SYC7-1948-03	
5745-SC-LBR	SYC7-1949-03	
5745-SC-LNK	SYC7-1950-03	
5745-SC-MCR	SYC7-1951-00	SNC7-1953, SNC7-1974,
		SNC7-2006
5745-SC-OCR	SYC7-1952-00	SNC7-1954, SNC7-1975,
		SNC7-1996
5745-SC-OLT	SYC7-1953-00	SNC7-1955, SNC7-1976,
		SNC7-1994
5745-SC-PDA	SYC7-1954-03	
5745-SC-PTP	SYC7-1955-00	SNC7-1956, SNC7-1977,
		SNC7-2007
5745-SC-PWR	SYC7-1976-02	
5745-SC-QTM	SYC7-1957-00	SNC7-1957, SNC7-1965,
		SNC7-1991
5745-SC-RMS	SYC7-1958-03	
5745-SC-SSS	SYC7-1970-02	
5745-SC-SUP	SYC7-1959-00	SNC7-1958, SNC7-1978,
		SNC7-2008
5745-SC-TAP	SYC7-1960-00	SNC7-1959, SNC7-1979,
		SNC7-2009
5745-SC-TPE	SYC7-1961-00	SNC7-1960, SNC7-1980,
		SNC7-2010
5745-SC-TLT	SYC7-1969-01	
5745-SC-UTL	SYC7-1962-03	
5745-SC-VSM	SYC7-1963-03	
5745-SC-VTM	SYC7-1968-01	
5745-SC-124	SYC7-1971-01	
MASTER INDEX	SYC7-1965-04	

In the case of use key 'S' items, a single copy is available
without charge. In the case of use key 'G' items, sufficient
copies to meet 'normal requirements' are available without
charge at the branch office discretion. Additional copies
may be purchased from the distribution center. See the cur-
rent price list for selling price.

Ordering Information for CICS/OS/VS V1.1.0 (order through AAS)

PID will automatically send current users a memo with ordering information. To receive this new program material, users must follow the ordering instructions and send the necessary tapes or disks to PID.

New orders for this program are to be entered via AAS using ordering instructions below.

Type: 5740. Model: XX1. Monthly Charge: $825.

Basic Material

Licensed Machine Readable Material: Consists of the Assembler Language, macro library, ANS COBOL macro library, PL/I macro library, and Assembler Language source library.

To order, select the feature number of the desired distribution medium.

Feature Number	Distribution Medium	User Volume Required
9027	9/800 - M Tape	none
9029	9/1600 - M Tape	none
9031	9/6250 - M Tape	none

Documentation: Memo, Program Directory, and one copy of each document listed will be supplied automatically with the basic machine readable material.

Licensed Documentation: Program Logic Manual (LY20-8006).

Unlicensed Documentation: Operations Guide (SH20-9011) ... Application Programmer's Reference Manual (SH20-9003) ... System Programmer's Reference Manual (SH20-9004) ... Terminal Operator's Guide (SH20-9005) ... System Administrator's Guide (SH20-9006) ... System/Application Design Guide (SH20-9002) ... Messages and Codes Manual (SH20-9008) ... Specifications (GH20-4354) ... Advanced Communications Guide (SH20-9049).

Related Optional Material (no additional charge)

Licensed Documentation: One copy of Program Listings (microfiche) (LYB0-8008). To order, use feature 7050.

Scheduled Program Ship Date: See *Guide for Ordering Programs* (ZZ20-3651).

Stackability: This program is not stackable.

Charges for Additional Copies of Documentation

Licensed Documentation: For customer, order by feature number from PID and bill customer; for IBM internal use, order by form number from Mechanicsburg.

Feature/Form No.	Single Charge/Copy
CICS/OS/VS Program Logic Manual 8001/LY20-8006	$77.00
CICS/OS/VS Microfiche 8040/LYB0-8008	80.00

Unlicensed Documentation: Order from Mechanicsburg via SLSS subscription; one copy will be provided without charge as will update service for additional purchased copies. Customer will be billed for additional purchased copies by Mechanicsburg through Bethesda.

	Selling/Price Copy
System/Application Design Guide (SH20-9002)	$11.50
Application Programmer's Reference Manual (SH20-9003)	28.00
System Programmer's Reference Manual (SH20-9004)	15.00
Terminal Operator's Guide (SH20-9005)	.80
System Administrator's Guide (SH20-9006)	5.00
Messages and Codes Manual (SH20-9008)	6.40
Operations Guide (CICS/OS/VS) (SH20-9011)	3.60
Advanced Communication Guide (SH20-9049)	9.00

12

STACKABLE PROGRAM CHART

TYPE	MODEL	PROGRAM OR FEATURE NAME	CYLINDER REQUIREMENTS ** 2316 PACK (200 CYL) FEATURE	CYL	3336 PACK (404 CYL) FEATURE	CYL	3348 MODULE (348 OR 695 CYL) FEATURE	CYL
5707	LH1	AML/7	9060	53	9061	37	9063	92
5707	M32	Manufacturing Monitoring System DOS/VS	9060	17	9061	12	9063	28
5707	M32	MMS S/370 Data Feature	6008	7	6009	5	6010	11
5731	AA1	DOS Type 1 Package	9060	27	9061	19	9063	45
5736	CB1	DOS ANS Subset COBOL	9060	8	9061	6	9063	13
5736	CB1	DOS ANS Subset COBOL Optional	7060	83	7061	58	7063	137
5736	CB2	ANS Full COBOL Version 3	9060	7	9061	5	NA	-
5736	CB2	ANS Full COBOL Version 3 Opt.	7060	93	7061	65	NA	-
5736	F01	S/7 FORTRAN	7060	38	9061	26	9063	62
5736	LM2	ANS Full COBOL Library	9060	2	9061	2	NA	-
5736	LM2	ANS Full COBOL Library Opt.	7060	24	7061	17	NA	-
5736	LM4	DOS PL/1 Resident Library	9060	7	9061	5	9063	11
5736	LM5	DOS PL/1 Transient Library	9060	2	9061	1	9063	3
5736	PL1	DOS PL/1 Optimizing Compiler	9060	15	9061	11	9063	24
5736	PL3	DOS PL/1 Composite Package	9060	22	9061	16	9063	36
5736	RG1	DOS RPG 2	9060	4	9061	3	9063	7
5736	RG1	DOS RPG 2 Optional	7060	48	7061	34	7063	79
5736	RG1	RPG AUTO Report Feature	6035	1	6036	1	6037	2
5736	XC3	APG/7 DOS	9060	15	9061	9	NA	-
5736	XC3	APG/7 DOS Optional	7060	74	7061	45	NA	-
5736	XC4	OMS II DOS/VS	9060	29	9061	21	9063	49
5736	XS4	Forecasting & Modeling Sys. (FAMS/DOS)	9060	19	9061	13	9063	31
5736	X54	Forecasting & Modeling Sys.	7060	23	7061	16	7063	37
+5736	XX4	OBOMP	9060	31	9061	22	9063	51
5736	XX4	OBOMP - CICS/OASF FEAT	6044	21	6045	15	6046	25
5736	XX5	Purchasing (DOS)	9060	38	NA	-	NA	-
5735	XX6	DOS Entry (CICS/DOSE)	9060	45	NA	-	NA	-
5736	XX7	DOS STANDARD (CICS)	9060	46	NA	-	NA	-
+5745	010	DOS/VS - Basic	9060	196	9061	123	9063	320
+5745	010	DOS/VS Optional Volume 1	7804	105	7805	74	7806	174
+5745	010	DOS/VS Optional Volume 2	7810	82	7811	58	7812	136
+5745	010	DOS/VS Optional Volume 3	7816	91	7817	64	7818	152
+5745	010	DOS/VS Optional Volume 4	7822	109	7823	77	7824	182
+5745	010	DOS/VS Optional Volume 5	7834	114	7835	80	7836	192
+5745	010	DOS/VS Optional Volume 6	7845	122	7846	86	7847	204
+5745	010	DOS/VS Optional Volume 7	7855	97	7856	68	7857	160
+5745	010	DOS/VS Optional Volume 8	7861	15	7862	11	7863	24
+5745	010	DOS/VS Optional Volume 9	7867	78	7868	55	7869	129
+5745	010	DOS/VS Optional Volume 10	7873	110	7874	78	7875	184
+5745	010	DOS/VS Optional Volume 11	7879	115	7880	81	7881	192
+5745	010	DOS/VS Optional Volume 12	7885	92	7886	65	7887	153
+5745	010	DOS/VS Optional Volume 13	7891	124	7892	87	7893	206
+5745	010	DOS/VS Optional Volume 14	7897	109	7898	76	7899	181
+5745	010	DOS/VS Optional Volume 15	7903	97	7904	68	7905	162
+5745	010	DOS/VS Optional Volume 16	7909	60	7910	49	7911	99
+5745	010	DOS/VS Optional Volume 17	7915	77	7916	54	7917	128
5746	CB1	DOS/VS COBOL Comp. & Lib.	9060	10	9061	7	9063	16
5746	CB1	DOS/VS COBOL Comp & Lib Opt.	7060	141	7061	99	7063	235
5746	FS1	DOS/VS BUDPLAN	NA	-	9061	13	9063	31
5746	FS1	DOS/VS BUDPLAN Optional	NA	-	7061	18	7063	52
5746	LM3	DOS FORTRAN IV Lib.	9060	1	9061	1	9063	1
5746	LM3	DOS FORTRAN IV Lib. Optional	7060	4	7061	3	7063	6
5746	LM4	DOS/VS COBOL Library	9060	2	9061	2	9063	3
5746	LM4	DOS/VS COBOL Library Optional	7060	35	7061	23	7063	55
5746	SM1	DOS/VS Sort/Merge	9060	6	9061	4	9063	11
5746	SM1	DOS/VS Sort/Merge Optional	7060	93	7061	69	7063	163
5746	XM2	MPSX/370 - DOS/VS	NA	-	9061	7	9063	15
5746	XM2	MPSX/370 - DOS/VS Optional	NA	-	7061	65	7063	154
5746	XM2	MPSX/370-DOS/VS MIP/370 Feature	NA	-	6042	2	6043	4

STACKABLE PROGRAM CHART

TYPE	MODEL	PROGRAM OR FEATURE NAME	CYLINDER REQUIREMENTS ** 2316 PACK (200 CYL) FEATURE	CYL	3336 PACK (404 CYL) FEATURE	CYL	3348 MODULE (348 OR 696 CYL) FEATURE	CYL
5746	XM2	MPSX/370-DOS/VS MIP/370 Feat.Opt.	NA	-	7404	32	7405	74
5746	XN1	S/370 APT-BC DOS/VS	9060	21	9061	15	9063	35
5745	XN1	S/370 APT-BC DOS/VS Optional	7060	42	7061	30	7063	70
5745	YN2	Machining & Display App. (MDAP)	9060	33	9061	23	9063	54
5746	XP1	PROJACS - Main Processor	9060	8	9061	6	9063	13
5746	XP1	PROJACS - Main Processor Optional	7060	14	7061	10	7063	23
5746	XP1	PROJACS - Resource Allocation Processor	6006	2	6007	2	6008	3
5746	XP1	PROJACS - Resource Allocation Processor Optional	7404	5	7405	4	7406	8
5746	XP1	PROJACS - Cost Evaluation Processor	6011	1	6012	1	6013	2
5746	XP1	PROJACS - Cost Evaluation Processor Optional	7410	2	7411	1	7412	3
5745	XP1	PROJACS - Network Preparation Processor	6016	2	6017	1	6018	2
5745	XP1	PROJACS - Network Preparation Processor Optional	7416	3	7417	2	7418	4
5746	XT1	Planning Systems Generator II/ VS/DOS/VS	9060	3	9061	2	9063	4
5746	XT1	Planning Systems Generator II/ VS/DOS/VS	7060	4	7061	3	7063	7
5746	XX3	Customer Information Ctrl Sys Virtual Storage (CICS/DOS/VS)	9060	107	9061	75	9063	179
5746	XX3	Customer Information Ctrl Sys Virtual Storage (CICS/DOS/VS)	9260	129	9261	91	9263	215
5746	XX3	FASTER Language Facility Feat.	6022	10	6023	7	6024	16
+5746	XX7	DL/1-Entry DOS/VS	9060	12	9061	8	9063	19
5747	AF1	HPPF II MSP/7	9060	75	9061	53	9063	125
5747	AG1	3704/3705 Emul Supp DOS/VS	9060	7	9061	5	9063	10
5747	AG1	3704/3705 Emul Supp DOS/VS Opt.	7060	44	7061	31	7063	73
+5747	AJ2	3704/3705 NCP Supp Pkg DOS/VS	9060	80	9061	56	9063	133
+5747	AJ2	3704/3705 NCP Supp Pkg DOS/VS Optional	7060	109	7061	77	7063	181
5747	AZ1	3735 Forms Description Utility	9060	11	9061	8	9063	18
5747	BJ1	3650 Retail Stores System-Host Support	9060	14	9061	9	9063	21
5747	BJ1	3650 Retail Stores System-Host Support Optional	7060	133	7061	94	7063	222
5747	BK1	3660 Supermarket System-Host Support	9060	8	9061	4	9063	11
5747	BK1	3660 Supermarket System-Host Support Optional	7060	38	7061	27	7063	63
+5747	BQ1	3790 Host Supp Comm. System DOS/VS	9060	4	9061	3	9063	6
+5747	BQ1	3790 Host Supp Comm. System DOS/VS Optional	7060	41	7061	29	7063	69
5748	XX1	VS BASIC Processor	9060	14	9061	10	9063	23
5748	XX1	VS BASIC Processor Optional	7060	25	7061	18	7063	41
5785	ABT	Dist. Order Entry System (2314)	9060	154	NA	-	NA	-
5785	ABT	Dist. Order Entry Sys (3330/40)	NA	-	6003	8	6006	23
5799	BLZ	3735 Support	9060	11	9061	8	9063	18
5799	WHX	DOS/VS Remote Job Entry Workstation	9060	20	9061	14	9063	33

+ New or changed this month.
NA Not available on this medium.

Use this chart to determine the number of disks (2316/3336 pack or 3348 data module) needed for new orders, additional features or new releases. The total cylinder requirements for all programs and features, to be shipped at the same time is to be divided by the cylinder capacity of the disk type (shown in the heading). The result (rounded up) is the number of disks to be sent to PID. Only programs and features with cylinder requirements listed in the same column can be distributed on the same disk. Programs or features not on the chart are not stackable and require a separate disk for each program or feature.